AMENDED CLAIM SET:

1. (currently amended) A method for producing an optical device having an organic polymer film through which a light beam is transmitted, which comprises

applying a solution containing an organic polymer film-forming starting material on a substrate to form the applied film,

and then baking the applied film under vacuum of 1 Torr or lower to form the organic polymer film,

wherein the organic polymer film has a high transmittance an absorptivity coefficient of light of not more than 7.0 mm^{-1} when the light beam has a wavelength of 1.5 μm or shorter.

2. (withdrawn - currently amended) A method for producing an optical device having an organic polymer film through which a light beam is transmitted, which comprises

applying a solution containing an organic polymer film-forming starting material on a substrate to form the applied film,

and then baking the applied film under gaseous nitrogen to form the organic polymer film,

wherein the organic polymer film has a high-transmittance an absorptivity coefficient of light of not more than 7.0 mm $^{-1}$ when the light beam has a wavelength of 1.5 μ m or shorter.

- 3. (original) A method according to claim 1, wherein the organic polymer film has an absorptivity coefficient of light of not more than 1.6 mm⁻¹ in the wavelength of 650 nm.
- 4. (original) A method according to claims 1 or 2, wherein the light beam has a wavelength of 500 nm to 800 nm.

- 5. (original) A method according to claims 1 or 2, wherein the organic polymer film is a polyimide resin film.
- 6. (currently amended) A method according to claim 5 [[1]], wherein the polyimide resin film is a photosensitive polyimide resin film.

7. (cancelled).

- 8. (original) A method according to claim 1, wherein the organic polymer film has a thickness not less than 5 μm and not more than 200 μm .
- 9. (original) A method according to claim 1, wherein the applied film is preparatorily heated under atmospheric pressure, before the baking under vacuum.
- 10. (original) A method according to claim 1, wherein the baking is performed under a vacuum of 1 \times 10⁻² Torr.
- 11. (currently amended) A method according to claim 6, wherein the photosensitive polyimide type resin film is an acetophenone type resin film.
- 12. (currently amended) A method according to claim 6, wherein the photosensitive polyimide type resin film includes a tertiary amine.
- 13. (currently amended) A method according to claim 1, wherein the organic polymer film-forming starting material is a precursor of a polyimide type resin.